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EXAMINER	
TRAN, MY CHAU T	

ART UNIT	PAPER NUMBER
1639	

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/878,108	CHILDERS, WINTHROP D.	
	Examiner	Art Unit	
	MY-CHAU T. TRAN	1639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-10,28,31-34,36 and 38-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-10,28,31-34,36 and 39-43* is/are rejected.

7)☒ Claim(s) *38* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *6/7/01 & 4/17/03* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Application and Claims Status

1. Applicant's amendment and response filed 03/17/2005 is acknowledged and entered. Claim 37 has been canceled. Claims 36, and 38-41 have been amended

2. Claims 2 and 27 were canceled and Claims 1, 28, 36, 37, 39-41, and 43 were amended by the amendment filed on 07/30/2004.

3. Claims 29-30, and 35 were canceled; Claims 1-7, 10, 27-28, and 31 were amended; and Claims 36-43 were added by the amendment filed on 04/16/2004.

4. Claims 11-26 were canceled, and Claims 1, 27-28, 31, and 34-35 were amended by the amendment filed on 09/12/2003.

5. Claims 1-2, 4-6, and 10 were amended, and Claims 27-35 were added by the amendment filed on 04/17/2003.

6. Claims 1, 3-10, 28, 31-34, 36, and 38-43 are pending.

Maintained Rejection(s)

7. Claims 1, 3-10, 28, 31-34, 36, and 38-43 are treated on the merit in this Office Action.

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 1, 3-10, 28, and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stylli et al. (US Patent 5,985,214) and Bullock et al. (US Patent 5,812,156).

The instants claim 1 recite an automated method for analyzing substances containing cellular material. The method comprises the steps of a) removably receiving at least one consumable cartridge containing at least one potential pharmaceutically active agent into a test apparatus; b) activating the test apparatus to dispense a first defined volume of the potential pharmaceutically active agent from the drop-on-demand printhead of the liquid ejection device into contact with the defined volume of a substance containing a target cellular material; c) capturing and maintaining information via a memory storage device of the consumable cartridge pertaining to a function of the consumable cartridge and the potential pharmaceutically active agent; d) detecting in the at least one defined volume of the substance a pharmacological effect on the target cellular material triggered by introduction of the first defined volume of the at least one potential pharmaceutically active agent; e) generating information indicative of the pharmacological effect of the at least one potential pharmaceutically active agent on the target cellular material; and f) analyzing the generated information to generate a correlation factor regarding the pharmacological effect of the at least one potential pharmaceutically active agent on the target cellular material.

The test apparatus comprises a liquid ejection device that includes the consumable cartridge and an electronically actuated drop-on-demand printhead wherein the printhead is acting in fluid communication and electronic communication with the consumable cartridge. The target cellular material is whole cells or recognized cellular components from intact cells.

Stylli et al. disclose systems and methods that utilize automated and integratable workstations for identifying chemicals having useful activity such as biological activities, and collecting informations resulting from such a process (see e.g. Abstract; col. 2, lines 35-41; col. 6, lines 1-24; col. 32, line 57 to col. 33, lines 55; col. 37, line 1 to col. 38, line 67). The assay discloses by Stylli et al. is for identifying chemicals (refers to the presently claimed potential pharmaceutical active agent) that have biological activity (see e.g. col. 37, line 1 to col. 38, line 67; col. 39, lines 16-25; col. 40, lines 6-18; col. 42, line 36 to col. 43, line 10; col. 43, lines 6-9).

The assay includes cell based assay using whole cell (refers to the presently claimed target cellular material is whole cell) or biological assay using target free of cells (refers to the presently claimed target cellular material is recognized cellular components from intact cells). The method comprise of dispensing the chemical into the addressable sample wells, which contains a predetermined volume of the sample (refers to the presently claimed target cellular material cellular material) (see e.g. col. 6, lines 25-40; col. 8, lines 14-18). The method includes storing, managing, and retrieving data collected from the assay process, i.e. the managing a continuous control based on process variables as well as real-time events (refers to the presently claimed method step of generating information indicative of an effect of the at least one potentially active agent and analyzing the generated information to generate a correlation factor) (see e.g. col. 28, line 65 to col. 29, line 12; col. 29, lines 14-26; col. 30, lines 59-62; col. 31, lines 4-16, and 43-45). The automated method can comprise of multiple dispensers for dispensing different reagents in a complex screening process (see e.g. col. 33, lines 32-48), and generating specific liquid dispensation patterns and volumes to the high-density plate (see e.g. col. 60, lines 3-8) (referring to claims 10, and 31-34). The method also includes the step of activating a second reagent dispenser (refers to the presently claimed second liquid ejection device) (see e.g. col. 32, line 59 to col. 33, line 11). The dispenser is in communication with the dispensing nozzle (printhead) (see e.g. col. 16, lines 30-32, and 38-51). The system of Stylli et al. includes a storage and retrieval module (see e.g. col. 11, line 59 to col. 12, line 3; fig. 3, ref. #160; col. 19, lines 45-54; fig. 5, ref. #306) that is associated with a sample distribution module that can dispense large numbers of solutions (see e.g. col. 12, lines 5-11). The sample distribution module comprises a liquid handler (refers to the presently claimed liquid injection device) (see

e.g. col. 13, lines 6-15), which comprises a plurality of nanoliters dispensers (see e.g. col. 15, lines 40-44). The nanoliters dispenser comprises fluid reservoir that are region of a dispenser tip that hold fluid aspirated the nanoliters dispenser (see e.g. col. 16, lines 10-17).

The liquid dispensing system of Stylli et al. differs from the presently claimed invention by failing to include a consumable cartridge wherein the consumable cartridge includes a memory storage device for capturing and maintaining information pertaining to the function of the consumable cartridge and is in fluid communication with the printhead. The method of Stylli et al. differs from the presently claimed invention by failing to include the method steps of removably receiving a consumable cartridge into the apparatus and capturing and maintaining information pertaining to the function of the consumable cartridge via memory storage device of the consumable cartridge.

Bullock et al. disclose a printing system (see e.g. Abstract; col. 2, lines 20-37; col. 3, line 64 to col. 4, line 13). The printing system replaceable cartridge and an ink jet head (i.e. a printhead) (see e.g. col. 2, lines 20-37; col. 3, line 64 to col. 4, line 13). The replaceable cartridge comprises a housing (refers to the presently claimed chamber) (see e.g. col. 2, lines 20-21) and a cartridge memory (refers to the presently claimed memory storage device) (see e.g. col. 2, lines 21-23). The cartridge memory captures and maintains information pertaining to the function of the replaceable cartridge and the media parameters (see e.g. col. 2, lines 20-37; col. 3, line 64 to col. 4, line 13). The ink jet head and the replaceable cartridge are in fluid communication and electronic communication (see e.g. col. 2, lines 26-37; col. 3, line 64 to col. 4, line 13; col. 5, lines 6-16).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a consumable cartridge wherein the consumable cartridge includes a memory storage device for capturing and maintaining information pertaining to the function of the consumable cartridge and is in fluid communication with the printhead; and the method steps of removably receiving a consumable cartridge into the apparatus and capturing and maintaining information pertaining to the function of the consumable cartridge via memory storage device of the consumable cartridge as taught by Bullock et al. in the apparatus and method of Stylli et al. One of ordinary skill in the art would have been motivated to include a consumable cartridge wherein the consumable cartridge includes a memory storage device for capturing and maintaining information pertaining to the function of the consumable cartridge and is in fluid communication with the printhead; and the method steps of removably receiving a consumable cartridge into the apparatus and capturing and maintaining information pertaining to the function of the consumable cartridge via memory storage device of the consumable cartridge in the apparatus and method of Stylli et al. for the advantage of providing an improved printhead system that incorporates real time control functions that are responsive to parameters read from plural consumable parts (Bullock: col. 2, lines 15-18). Furthermore, one of ordinary skill in the art would have reasonably expectation of success in the combination of Stylli et al. and Bullock et al. because both Stylli et al. and Bullock et al. discloses a printhead system.

10. Claims 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stylli et al. (US Patent 5,985,214) and Bullock et al. (US Patent 5,812,156).

The instants claim 36 recite an automated method for analyzing substances containing cellular material. The method comprises the steps of a) removably receiving into a test

apparatus a liquid ejection device; b) activating the test apparatus to dispense via a printhead a first defined volume containing the potential pharmaceutically active agent from the liquid ejection device into contact with the defined volume of a substance containing a target cellular material; c) capturing and maintaining via a memory storage device of the cartridge information pertaining to a function of the cartridge and the potential pharmaceutically active agent contained within the cartridge; d) detecting in the defined volume a pharmacological effect on the target cellular material triggered by introduction of the first defined volume of the potential pharmaceutically active agent; e) generating information indicative of the pharmacological effect of the at least one potential pharmaceutically active agent on the target cellular material; and f) analyzing the generated information to generate a correlation factor regarding the pharmacological effect of the at least one potential pharmaceutically active agent on the target cellular material.

The liquid ejection device comprises a consumable cartridge wherein the consumable cartridge includes a chamber containing a potential pharmaceutically active agent, a memory storage device, and an electronically actuated drop-on-demand printhead in fluid communication with the chamber. The target cellular material is whole cells or recognized cellular components from intact cells.

Stylli et al. disclose systems and methods that utilize automated and integratable workstations for identifying chemicals having useful activity such as biological activities, and collecting informations resulting from such a process (see e.g. Abstract; col. 2, lines 35-41; col. 6, lines 1-24; col. 32, line 57 to col. 33, lines 55; col. 37, line 1 to col. 38, line 67). The assay discloses by Stylli et al. is for identifying chemicals (refers to the presently claimed potential pharmaceutical active agent) that have biological activity (see e.g. col. 37, line 1 to col. 38, line 67; col. 39, lines 16-25; col. 40, lines 6-18; col. 42, line 36 to col. 43, line 10; col. 43, lines 6-9). The assay includes cell based assay using whole cell (refers to the presently claimed target cellular material is whole cell) or biological assay using target free of cells (refers to the presently claimed target cellular material is recognized cellular components from intact cells). The method comprise of dispensing the chemical into the addressable sample wells, which contains a predetermined volume of the sample (refers to the presently claimed target cellular material cellular material) (see e.g. col. 6, lines 25-40; col. 8, lines 14-18). The method includes

storing, managing, and retrieving data collected from the assay process, i.e. the managing a continuous control based on process variables as well as real-time events (refers to the presently claimed method step of generating information indicative of an effect of the at least one potentially active agent and analyzing the generated information to generate a correlation factor) (see e.g. col. 28, line 65 to col. 29, line 12; col. 29, lines 14-26; col. 30, lines 59-62; col. 31, lines 4-16, and 43-45). The automated method can comprise of multiple dispensers for dispensing different reagents in a complex screening process (see e.g. col. 33, lines 32-48), and generating specific liquid dispensation patterns and volumes to the high-density plate (see e.g. col. 60, lines 3-8) (referring to claims 10, and 31-34). The method also includes the step of activating a second reagent dispenser (refers to the presently claimed second liquid ejection device) (see e.g. col. 32, line 59 to col. 33, line 11). The dispenser is in communication with the dispensing nozzle (printhead) (see e.g. col. 16, lines 30-32, and 38-51). The system of Stylli et al. includes a storage and retrieval module (see e.g. col. 11, line 59 to col. 12, line 3; fig. 3, ref. #160; col. 19, lines 45-54; fig. 5, ref. #306) that is associated with a sample distribution module that can dispense large numbers of solutions (see e.g. col. 12, lines 5-11). The sample distribution module comprises a liquid handler (refers to the presently claimed liquid injection device) (see e.g. col. 13, lines 6-15), which comprises a plurality of nanoliters dispensers (see e.g. col. 15, lines 40-44). The nanoliters dispenser comprises fluid reservoir that are region of a dispenser tip that hold fluid aspirated the nanoliters dispenser (see e.g. col. 16, lines 10-17).

The liquid dispensing system of Stylli et al. differs from the presently claimed invention by failing to include a consumable cartridge that is in fluid communication with the printhead and the includes consumable cartridge a memory storage device for capturing and maintaining

information pertaining to the function of the consumable cartridge. The method of Stylli et al. differs from the presently claimed invention by failing to include the method step of removably receiving a consumable cartridge into the apparatus and the method step of capturing and maintaining information pertaining to the function of the consumable cartridge via memory storage device of the consumable cartridge.

Bullock et al. disclose a printing system (see e.g. Abstract; col. 2, lines 20-37; col. 3, line 64 to col. 4, line 13). The printing system replaceable cartridge and an ink jet head (i.e. a printhead) (see e.g. col. 2, lines 20-37; col. 3, line 64 to col. 4, line 13). The replaceable cartridge comprises a housing (refers to the presently claimed chamber) (see e.g. col. 2, lines 20-21) and a cartridge memory (refers to the presently claimed memory storage device) (see e.g. col. 2, lines 21-23). The cartridge memory captures and maintains information pertaining to the function of the replaceable cartridge and the media parameters (see e.g. col. 2, lines 20-37; col. 3, line 64 to col. 4, line 13). The ink jet head and the replaceable cartridge are in fluid communication and electronic communication (see e.g. col. 2, lines 26-37; col. 3, line 64 to col. 4, line 13; col. 5, lines 6-16).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a consumable cartridge wherein the consumable cartridge includes a memory storage device for capturing and maintaining information pertaining to the function of the consumable cartridge and is in fluid communication with the printhead; and the method steps of removably receiving a consumable cartridge into the apparatus and capturing and maintaining information pertaining to the function of the consumable cartridge via memory storage device of the consumable cartridge as taught by Bullock et al. in the apparatus and

method of Stylli et al. One of ordinary skill in the art would have been motivated to include a consumable cartridge wherein the consumable cartridge includes a memory storage device for capturing and maintaining information pertaining to the function of the consumable cartridge and is in fluid communication with the printhead; and the method steps of removably receiving a consumable cartridge into the apparatus and capturing and maintaining information pertaining to the function of the consumable cartridge via memory storage device of the consumable cartridge in the apparatus and method of Stylli et al. for the advantage of providing an improved printhead system that incorporates real time control functions that are responsive to parameters read from plural consumable parts (Bullock: col. 2, lines 15-18). Furthermore, one of ordinary skill in the art would have reasonably expectation of success in the combination of Stylli et al. and Bullock et al. because both Stylli et al. and Bullock et al. discloses a printhead system.

11. Claim 41-42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stylli et al. (US Patent 5,985,214) and Bullock et al. (US Patent 5,812,156).

The instants claim 41 recite an automated method for analyzing substances containing cellular material. The method comprises the steps of a) removably receiving the replaceable cartridge containing the potential pharmaceutically active agent into a test apparatus; b) activating the test apparatus to dispense a first defined volume containing the potential pharmaceutically active agent from the drop-on-demand printhead of the liquid ejection device into contact with the defined volume of a substance containing a target cellular material; c) detecting in the defined volume a pharmacological effect on the target cellular material triggered by introduction of the first defined volume of the potential pharmaceutically active agent; d) generating a first information indicative of the pharmacological effect of the potential pharmaceutically active agent on the target cellular material; e) dispensing interactively, based upon the generated information, a second defined volume of the potential pharmaceutically active agent from the liquid ejection device into contact with the defined volume of a substance containing the target cellular material; and f) generating a second information indicative of the effect of the potential pharmaceutically active agent on the target cellular material.

The test apparatus comprises a liquid ejection device that includes a replaceable cartridge and an electronically actuated drop-on-demand printhead wherein the printhead is

acting in fluid communication with the replaceable cartridge. The target cellular material is whole cells or recognized cellular components from intact cells.

Stylli et al. disclose systems and methods that utilize automated and integratable workstations for identifying chemicals having useful activity such as biological activities, and collecting informations resulting from such a process (see e.g. Abstract; col. 2, lines 35-41; col. 6, lines 1-24; col. 32, line 57 to col. 33, lines 55; col. 37, line 1 to col. 38, line 67). The assay discloses by Stylli et al. is for identifying chemicals (refers to the presently claimed potential pharmaceutical active agent) that have biological activity (see e.g. col. 37, line 1 to col. 38, line 67; col. 39, lines 16-25; col. 40, lines 6-18; col. 42, line 36 to col. 43, line 10; col. 43, lines 6-9). The assay includes cell based assay using whole cell (refers to the presently claimed target cellular material is whole cell) or biological assay using target free of cells (refers to the presently claimed target cellular material is recognized cellular components from intact cells). The method comprise of dispensing the chemical into the addressable sample wells, which contains a predetermined volume of the sample (refers to the presently claimed target cellular material cellular material) (see e.g. col. 6, lines 25-40; col. 8, lines 14-18). The method includes storing, managing, and retrieving data collected from the assay process, i.e. the managing a continuous control based on process variables as well as real-time events (refers to the presently claimed method step of generating information indicative of an effect of the at least one potentially active agent and analyzing the generated information to generate a correlation factor) (see e.g. col. 28, line 65 to col. 29, line 12; col. 29, lines 14-26; col. 30, lines 59-62; col. 31, lines 4-16, and 43-45). The automated method can comprise of multiple dispensers for dispensing different reagents in a complex screening process (see e.g. col. 33, lines 32-48), and generating specific liquid dispensation patterns and volumes to the high-density plate (see e.g. col. 60, lines

3-8) (referring to claims 10, and 31-34). The method also includes the step of activating a second reagent dispenser (refers to the presently claimed second liquid ejection device) (see e.g. col. 32, line 59 to col. 33, line 11). The dispenser is in communication with the dispensing nozzle (printhead) (see e.g. col. 16, lines 30-32, and 38-51). The system of Stylli et al. includes a storage and retrieval module (see e.g. col. 11, line 59 to col. 12, line 3; fig. 3, ref. #160; col. 19, lines 45-54; fig. 5, ref. #306) that is associated with a sample distribution module that can dispense large numbers of solutions (see e.g. col. 12, lines 5-11). The sample distribution module comprises a liquid handler (refers to the presently claimed liquid injection device) (see e.g. col. 13, lines 6-15), which comprises a plurality of nanoliters dispensers (see e.g. col. 15, lines 40-44). The nanoliters dispenser comprises fluid reservoir that are region of a dispenser tip that hold fluid aspirated the nanoliters dispenser (see e.g. col. 16, lines 10-17).

The liquid dispensing system of Stylli et al. differs from the presently claimed invention by failing to include a consumable cartridge that is in fluid communication with the printhead and the includes consumable cartridge a memory storage device for capturing and maintaining information pertaining to the function of the consumable cartridge. The method of Stylli et al. differs from the presently claimed invention by failing to include the method step of removably receiving a consumable cartridge into the apparatus and the method step of capturing and maintaining information pertaining to the function of the consumable cartridge via memory storage device of the consumable cartridge.

Bullock et al. disclose a printing system (see e.g. Abstract; col. 2, lines 20-37; col. 3, line 64 to col. 4, line 13). The printing system replaceable cartridge and an ink jet head (i.e. a printhead) (see e.g. col. 2, lines 20-37; col. 3, line 64 to col. 4, line 13). The replaceable

cartridge comprises a housing (refers to the presently claimed chamber) (see e.g. col. 2, lines 20-21) and a cartridge memory (refers to the presently claimed memory storage device) (see e.g. col. 2, lines 21-23). The cartridge memory captures and maintains information pertaining to the function of the replaceable cartridge and the media parameters (see e.g. col. 2, lines 20-37; col. 3, line 64 to col. 4, line 13). The ink jet head and the replaceable cartridge are in fluid communication and electronic communication (see e.g. col. 2, lines 26-37; col. 3, line 64 to col. 4, line 13; col. 5, lines 6-16).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a consumable cartridge wherein the consumable cartridge includes a memory storage device for capturing and maintaining information pertaining to the function of the consumable cartridge and is in fluid communication with the printhead; and the method steps of removably receiving a consumable cartridge into the apparatus and capturing and maintaining information pertaining to the function of the consumable cartridge via memory storage device of the consumable cartridge as taught by Bullock et al. in the apparatus and method of Stylli et al. One of ordinary skill in the art would have been motivated to include a consumable cartridge wherein the consumable cartridge includes a memory storage device for capturing and maintaining information pertaining to the function of the consumable cartridge and is in fluid communication with the printhead; and the method steps of removably receiving a consumable cartridge into the apparatus and capturing and maintaining information pertaining to the function of the consumable cartridge via memory storage device of the consumable cartridge in the apparatus and method of Stylli et al. for the advantage of providing an improved printhead system that incorporates real time control functions that are responsive to parameters read from

plural consumable parts (Bullock: col. 2, lines 15-18). Furthermore, one of ordinary skill in the art would have reasonably expectation of success in the combination of Stylli et al. and Bullock et al. because both Stylli et al. and Bullock et al. discloses a printhead system.

New Rejection(s) – Necessitated by Amendment

Claim Objections

12. Claim 38 is objected to as an improper dependent claim since it depends on cancel claim 37 that result in a broken pendency chain. However in order to further prosecution, Claim 38 is interpreted to depend on claim 36. Appropriate correction is required.

A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim.

A claim, which depends from a dependent claim, should not be separated by any claim, which does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general, applicant's sequence will not be changed. See MPEP § 608.01(n).

Withdrawn Objection(s) and /or Rejection(s)

13. The objections of claims 37 and 39 have been withdrawn in light of applicant's amendments of claim 39 and cancellation of claim 37.

14. The rejections of claims 36-43 under 35 USC 112, second paragraph, as being indefinite have been withdrawn in light of applicant's amendments of claims 36, 39, and 41.

Response to Arguments

15. Applicant's arguments directed to the rejections under 35 USC 103(a) as being unpatentable over Stylli et al. (US Patent 5,985,214) and Bullock et al. (US Patent 5,812,156) for claims 1, 3-10, 28, 31-34, 36, and 38-43 were considered but they are not persuasive for the following reasons.

Applicant contends that the combine teaching of Stylli et al. and Bullock et al. is not obvious over the presently claimed invention because 1) Stylli et al. do not disclose a memory storage device, and electronic and fluid communication between the 'dispenser' and 'fluid reservoir', and 2) there is no motivation to combine the teaching of Stylli et al. and Bullock et al. Therefore, the combine teaching of Stylli et al. and Bullock et al. is not obvious over the presently claimed invention.

Applicant's arguments are not convincing since the combine teaching of Stylli et al. and Bullock et al. is obvious over the presently claimed invention.

First, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Moreover, Stylli et al. do disclose a memory storage device (col. 60, lines 23-31), and electronic and fluid communication between the 'dispenser' and 'fluid reservoir' (col. 16, lines 30-32).

Second, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some

teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine the teaching of Stylli et al. and Bullock et al. is found in the teaching of Bullock et al., i.e. the advantage of providing an improved printhead system that incorporates real time control functions that are responsive to parameters read from plural consumable parts (Bullock: col. 2, lines 15-18).

Thus, the combine teaching of Stylli et al. and Bullock et al. is obvious over the presently claimed invention, and the rejections are maintained.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Chau T. Tran whose telephone number is 571-272-0810. The examiner can normally be reached on Monday: 8:00-2:30; Tuesday-Thursday: 7:30-5:00; Friday: 8:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew J. Wang can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mct
May 30, 2005

PADMASHRI PONNALURI
PRIMARY EXAMINER